IN THE CLAIMS

Please cancel claims 1-16 without prejudice or disclaimer thereof.

Listing of Claims

1-16 (canceled).

17. (New) A decoding apparatus comprising:

an error correcting decoding unit that decodes on a code block basis a concatenated code block with each code block having CRC-bit placed at the end;

a dividing unit that detects a position of concatenation of the concatenated code block with each code block decoded and performs division of the concatenated code block based on a detection result; and

an inspecting unit that performs CRC-bit cyclic redundancy inspection on each divided code block provided by said division unit.

18. (New) The decoding apparatus according to Claim 17, wherein said dividing unit detects the position by detecting the CRC-bit in the concatenated code block with each code block decoded and performs the division by dividing the concatenated code block into a code block so that each detected CRC-bit is placed at the end of each divided code block.

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19. (New) The decoding apparatus according to claim 17, further comprising a deleting unit that deletes, when known data exists in a decoded code block, the known data.

20. (New) The decoding apparatus according to claim 17, wherein said error correcting decoding unit replaces a soft decision value of the part of the known data of a code block with a maximum value of the soft decision value when the known data is 0 and replaces with a minimum value of the soft decision value when the known data is 1 and carries out error correcting decoding of the known data using the replaced soft decision value.

21. (New) A mobile station apparatus comprising the decoding apparatus according to claim 17.

22. (New) A base station apparatus comprising the decoding apparatus according to claim 17.

23. (New) A decoding method comprising the steps of:
(a) performing error correcting decoding on a code block basis on a concatenated code block with each code block having a CRC-bit placed at the end thereof;

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(b) detecting a position of concatenation of the concatenated code block with each code block decoded in step (a) and performing division of the concatenated code block based on a detection result; and

(c) performing CRC bit cyclic redundancy inspection on each divided code block.

24. (New) The decoding method according to claim 23, wherein said division includes detecting the CRC-bit in the concatenated code block with each code block decoded in step (a) and dividing the concatenated code block with each code block decoded in step (a) into a code block so that each detected CRC-bit is placed at the end of each divided code block.

25. (New) The decoding method according to claim 23, further comprising the step of deleting, when known data exists in a code block decoded in step (a), the known data.

26. (New) The decoding method according to claim 23, wherein step (a) includes replacing a soft decision value of the part of the known data of a code block with a maximum value of the soft decision value when the known data is 0 and replacing with a minimum value of the soft decision value when the known data is 1 and carrying out error correcting decoding of the known data using the replaced soft decision value.

27. (New) A coding/decoding method comprising decoding a signal coded by a coding method comprising the steps of adding a CRC-bit to transport blocks by performing CRC coding on a transport block basis; concatenating the transport blocks with each transport block having the CRC-bit to provide a concatenated transport block; segmenting the concatenated transport block into code blocks based on a number of the transport blocks, such that the CRC-bit exists at the end of each segmented code block; and performing error correcting coding on each segmented code block by a decoding method according to claim 23.